



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/577,815	04/28/2006	Jonas Scherble	285453US0PCT	6973
22850	7590	12/03/2009		
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P. 1940 DUKE STREET ALEXANDRIA, VA 22314				
EXAMINER				
LENIHAN, JEFFREY S				
ART UNIT		PAPER NUMBER		
1796				
NOTIFICATION DATE		DELIVERY MODE		
12/03/2009		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com
oblonpat@oblon.com
jgardner@oblon.com

Office Action Summary**Application No.**

10/577,815

Applicant(s)

SCHERBLE ET AL.

Examiner

Jeffrey Lenihan

Art Unit

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 August 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This Office Action is responsive to the amendment filed on 08/19/2009.
2. The objections and rejections not addressed below are deemed withdrawn.
3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office Action.

Claim Objections

4. Claim 11 is objected to because of the following informalities: As noted in the previous Office Action, the claim recites the term "load speaker," which appears to be a misspelling of "loudspeaker." Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claims 1, 3, 14, and 15 all recite the limitations of a polymer prepared by polymerizing a combination of (meth)acrylic acid and (meth)acrylonitrile. These limitations are inherited by all dependent claims. The examiner notes that the specification and claims as originally filed all recite that that the

polymer is produced from methacrylic acid and methacrylonitrile (see Specification page 7, lines 11-12; page 8, lines 8-9; Page 8, line 39 to page 9, line 1; claims 1 and 3). The specification does not teach the use of acrylonitrile, as claimed by the term (meth)acrylonitrile. Furthermore, acrylic acid is only recited as an example of the optional "other monomer having vinyl unsaturation" (Page 10, lines 22-23); acrylic acid is not taught as a substitute for methacrylic acid.

Claim Rejections - 35 USC § 103

7. Claims 1-5, 7, 8, and 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Geyer et al, US5928459, in view of Tada et al, US5225449.
8. The rejection stands as per the reasons outlined in the previous Office Action, incorporated herein by reference.
9. Regarding new claim 13: As discussed in the previous Office Action, Geyer discloses that the sheet comprising the polymer is heated to a temperature of 200-260 °C and foamed, corresponding to the claimed steps of heat treatment and foaming.
10. Regarding new claims 14 and 15: The examiner notes that the limitations of these claims were discussed in the previous Office Action with regards to claims 1 and 3.
11. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Geyer et al, US5928459, and Tada et al, US5225449, as applied to claim 5 above, and further in view of Stein et al, WO 03/020804.

The rejection stands as per the reasons outlined in the previous Office Action, incorporated herein by reference.

12. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Geyer et al, US5928459, and Tada et al, US5225449, as applied to claim 5 above, and further in view of Wu et al, US6396451.

The rejection stands as per the reasons outlined in the previous Office Action, incorporated herein by reference.

13. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Geyer et al, US5928459, and Tada et al, US5225449, as applied to claim 5 above, and further in view of Zacharopoulos et al, US2004/0034932.

The rejection stands as per the reasons outlined in the previous Office Action, incorporated herein by reference.

14. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Geyer et al, US5928459, and Tada et al, US5225449, as applied to claim 5 above, and further in view of Nieuwendijk et al, US4847908.

The rejection stands as per the reasons outlined in the previous Office Action, incorporated herein by reference.

15. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Geyer et al, US5928459, and Tada et al, US5225449, as applied to claim 5 above, and further in view of Baumann et al, US2002/0037955.

The rejection stands as per the reasons outlined in the previous Office Action, incorporated herein by reference.

Response to Arguments

16. Applicant's arguments filed 08/19/2009 have been fully considered but they are not persuasive.

17. Regarding the amount of TBMA/TBA: as noted by applicant, Tada discloses the use of 5-50% t-butyl (meth)acrylate; furthermore, Tada discloses an example wherein the amount of t-butyl methacrylate (TBMA) is 10 parts. In the case where the claimed ranges overlap or lie inside ranges disclosed by the prior art, a *prima facie* case of obviousness exists; see *In re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976); *In re Woodruff*, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990). It therefore would have been obvious to one of ordinary skill in the art at the time the invention was made to choose the overlapping portion of the prior art range and the claimed range.

18. Applicant argues that unexpected results are obtained from the claimed invention; however, the examiner takes the position that the allegedly unexpected results are not commensurate in scope with the claims as currently written. Regarding claims 1 and 3, the examiner first notes that the Examples provided in the specification only disclose the use of TBMA; the claims, however, recite the use of TBMA and/or t-

butyl acrylate (TBA). Applicant has not provided any evidence that the allegedly unexpected results are obtained when TBA is used; rather, applicant alleges that TBMA and TBA are comparable and that comparative data is not necessary (page 8, line 11-12).

19. Furthermore, the examiner takes the position that applicant has not demonstrated that the allegedly unexpected results are obtained commensurate in scope with the claimed range for the TBMA/TBA component (for claims 1, 3, 14, and 15). Applicant's examples compare an inventive composition containing 10 parts by weight (pbw) TBMA (example 6) with a comparative composition containing 20 pbw TBMA (example 7a); the difference in pore size between the two compositions is only 2 μm . The claims as currently written, however, recite that the maximum amount of TBMA/TBA is 15 pbw, a value halfway between the TBMA content of the inventive example and the TBMA content of the comparative example. Applicant therefore has not demonstrated that the allegedly unexpected results are obtained commensurate with the claimed range for TBMA/TBA.

Conclusion

20. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey Lenihan whose telephone number is (571)270-5452. The examiner can normally be reached on Monday through Thursday from 7:30-5:00 PM, and on alternate Fridays from 7:30-4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James J. Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ Irina S. Zemel/
Primary Examiner, Art Unit 1796

/Jeffrey Lenihan/
Examiner, Art Unit 1796

/JL/